proServices

The Leaders in Software Forensics

got bugs?

COMPANY HISTORY & BACKGROUND SUMMARY

proServices, a New Jersey Corporation, provides a Software Forensics Capability in the area of source code inspection services for Fortune 100 Companies and for the Federal Government. The company was founded to leverage its domain expertise in Software Development Manufacturing Processes, Methods and Commercial Automation Tools. This domain expertise is provided as a Strategic and Tactical Software Quality Risk Mitigation Service for new and existing software systems. We have been scrubbing our customer's software and providing valuable information for fifteen years. A partial list of customers have included AT&T, General Electric, Lockheed Martin, Raytheon, Hughes, Lucent, Motorola, EDS, Solomon Smith Barney, Goldman Sachs, NSA, U.S. Army, U.S. Navy—NAVAIR, NAVSEA, Federal Reserve and NASA.

Although functional domain expertise is not a requirement for this capability proServices has worked on a wide range of diverse systems. To name a few:

- Command & Control
- Tactical Communications
- Precision Guided Munitions
- Air Platforms
- Threat Countermeasure Systems
- Satellite Systems
- Intelligence
- Business Systems, etc…

SERVICE CAPABILITIES

A GENERAL PHYSICAL FOR YOUR SOFTWARE

Quality Assessment & Audit - This service represents a broad and general analysis of software quality indicators and attributes including but not limited to defensive programming, inspection attributes, structural metrics, code completeness, complexity, security, etc... In addition, a statistical defect analysis of instances is performed.

"HELP ME FIND THE BUGS"

Error Detection - This service consists of searching through source code for coding constructs suspected of being high priority bugs or violating important coding practices. The problem/issues found are categorized by severity and importance.

"MAKE IT RUN FASTER"

Performance Tuning - This service identifies modifications in the software application which improve the performance and response times. Recommendations are made based upon high value modifications with minimal architectural impacts.

"STOP IT FROM CRASHING!"

Memory Leak Detection – This service identifies overall machine performance degradation and crashes from running out of resources caused by memory leaks.

"**WHY ARE MY TESTS NOT CATCHING THESE ERRORS?"**

Testing Coverage Analysis – This service maps the customer's current inventory of tests to the percentage of the software system's source code it covers and identifies redundancy and insufficient testing.

"**MY PROGRAM HAS UNIQUE SOFTWARE REQUIREMENTS"**

Custom Software Standards Assessment - This service identifies a system's compliance to custom standards either created by customers, industry or Government authorities.

"**CAN MY SYSTEM BE EXPLOITED?"**

Software Threat Detection – This service consists of searching through source code for constructs (malicious code, trojan horses, time-bombs, etc…) which could potentially create opportunities for malicious exploitation in security of the system. proServices is the leading service capability within DOD to forensically analyze source code for vulnerabilities.

"**NEED HELP GETTING OUR NETWORTHINESS AUTHORIZATION TO OPERATE (ATO)"**

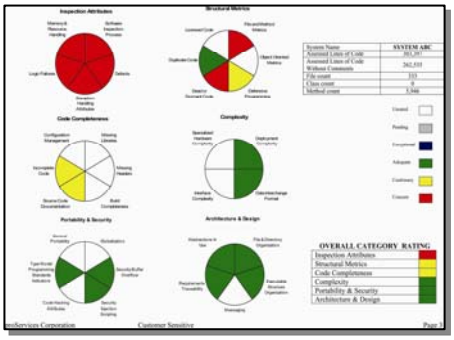
Networthiness Assessment & Audit – This service assesses a system's compliance to the published DISA Security Technical Implementation Guides (STIGS).

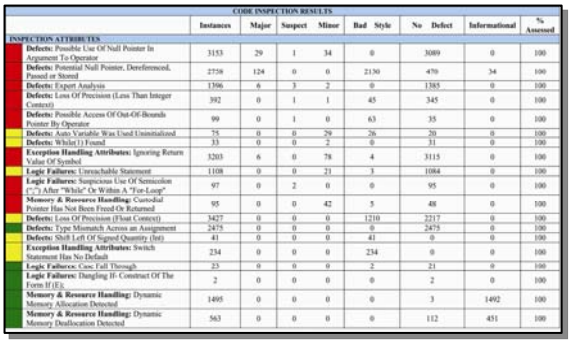
"NOTHING WE HAVE TRIED IS WORKING TO FIX QUALITY PROBLEMS!"

2nd Order Analysis – This service is a process of which source code is analyzed using highly customized scripts, tools and techniques to find root cause failure constructs hard to identify using traditional code inspection processes.

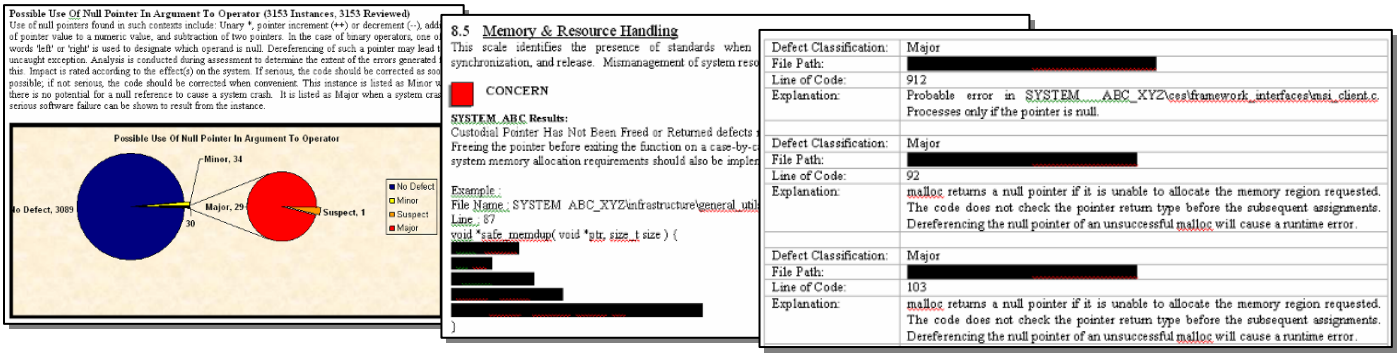
SERVICES DELIVERABLES

Executive ScoreCard Summary - The Executive Scorecard Summary Report is designed for Management to quickly assimilate data from proServices' technical report through graphics and comparative statistical information. In addition to the comparative analysis, the Scorecard Report offers a summation of the data and Software Manufacturing Process Improvements which prevent errors and other deficiencies. This report provides effective analysis of software project "Quality Measurement" for management and senior executives. (See Sample Pages Below)

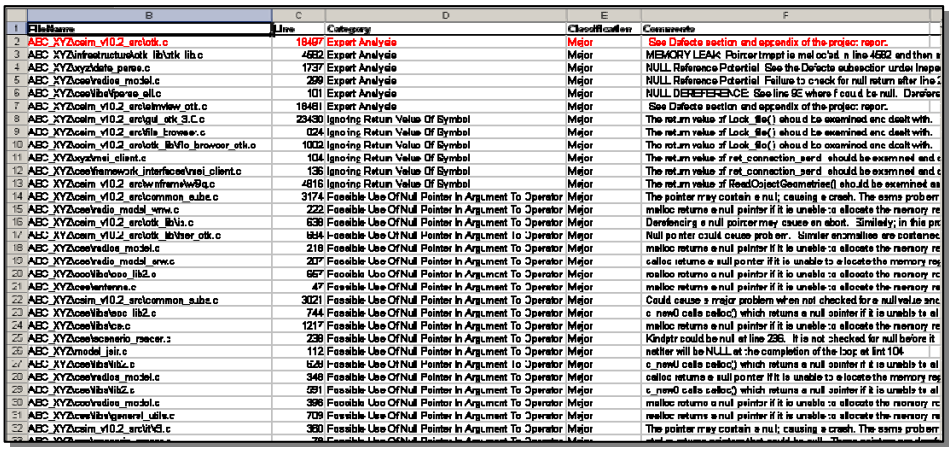




Detailed Technical Report - proServices provides a complete summation report of all findings and recommendations. This report contains a Source Code Analysis Review containing defect or issue analysis of individual instances and overall qualitative indicators per the scope of the service as identified in the software. It also provides recommendations for practical software development process improvements and describe solutions resulting from the Source Code Inspection Services performed in Immediate/Near, Mid and Long-term perspectives. (See Sample Pages Below)



***Electronic*-Defect Report(s)** – proServices will deliver all of the above reports electronically including all of the Raw Data files resulting from proServices' analysis. The Defect reports will be supplied in two (2) formats, a .CSV (comma separated value) and a .xls (Microsoft Excel Spreadsheet). The .xls report will be delivered with "Macros" so program engineers can rapidly navigate from the defects to the actual source code using a code editor program. (See Sample Page Below)



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